

Scaled data based on original data using  
LM-79-08 Approved Method: Electrical and Photometric Measurements of Solid-State  
Lighting Products

Test Report Prepared for  
Cooper Lighting Solutions  
(formerly Eaton)

Brand: NEO-RAY

Report Number: P242386

Luminaire Tested: **S122RDR-S1005D940-X4F0-XX-UDD-F-W**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P242386  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1802-639-24)  
Test Lab: INNOVATION CENTER  
Issue Date: 3/3/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: NEO-RAY  
Catalog Number: S122RDR-S1005D940-X4F0-XX-UDD-F-W  
Description: DEFINE 2 REGRESSED DIRECT RECESSED WITH SATIN FLUSH DIFFUSER  
STANDARD LIGHT ENGINE  
Light Source: (92) 4000K CCT, 90 CRI LEDS  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 3003.4 lumens  
Efficiency: N/A  
Efficacy: 73.1 lumens/watt  
Spacing Criteria (0/90/45): 1.2 / 0.99 / 1.16  
Luminous Opening: Rectangular (W 0.15' x L: 3.88' x H: 0')  
CIE Type: Direct

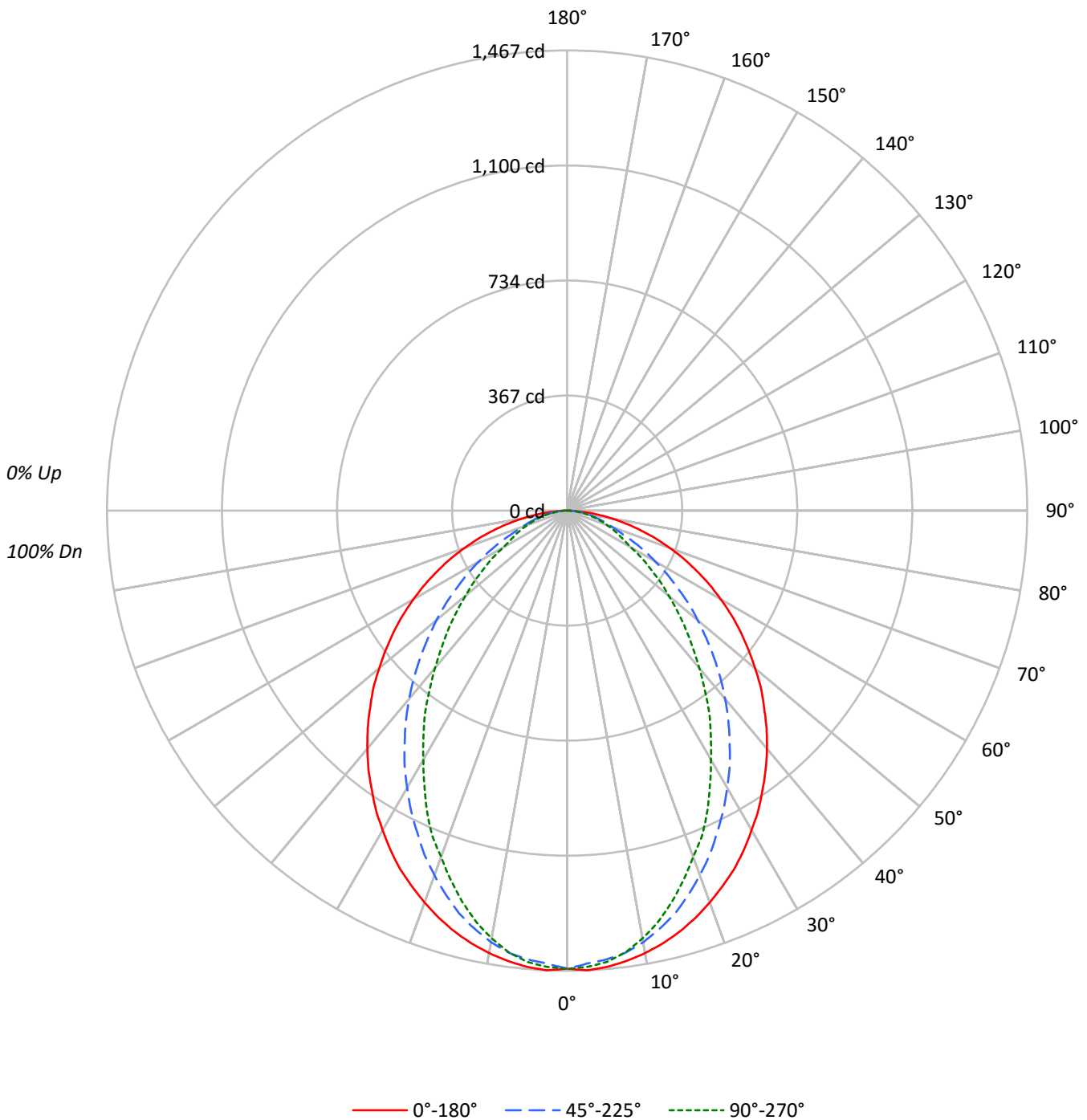
Input Watts (W): 41.1  
Input Voltage (V): 120  
Input Current (A<sub>in</sub>): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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### Luminous Intensity Polar Plot





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**COEFFICIENT OF UTILIZATION - ZONAL CAVITY METHOD:**

RF	20				20				20				20				20	
RC	80				70				50				30				10	0
RW	70	50	30	10	70	50	30	10	50	30	10	50	30	10	50	30	10	0
RCR																		
0	119	119	119	119	116	116	116	116	111	111	111	106	106	106	102	102	102	100
1	110	106	102	98	107	103	100	97	99	96	94	95	93	91	92	90	88	86
2	101	94	87	82	98	92	86	81	88	83	79	85	81	78	82	79	76	74
3	93	83	76	70	90	82	75	69	79	73	68	76	71	67	74	69	66	64
4	86	75	66	60	83	73	66	60	71	64	59	69	63	58	66	62	57	55
5	79	67	59	53	77	66	58	52	64	57	52	62	56	51	60	55	51	49
6	74	61	53	47	72	60	52	46	58	51	46	57	50	46	55	50	45	43
7	68	56	47	42	67	55	47	42	53	46	41	52	46	41	51	45	41	39
8	64	51	43	38	62	51	43	37	49	42	37	48	42	37	47	41	37	35
9	60	47	39	34	59	47	39	34	46	39	34	44	38	34	44	38	34	32
10	56	44	36	31	55	43	36	31	42	36	31	41	35	31	41	35	31	29

**AVERAGE LUMINANCE (cd/sqm):**

	0°	45°	90°
0°	27815	27815	27815
5°	27922	27468	27620
10°	27709	27018	26788
15°	27391	26217	25462
20°	26949	25074	23815
25°	26498	23776	22221
30°	25870	22441	20173
35°	25260	20988	18377
40°	24646	19487	16299
45°	23923	17800	14417
50°	23185	16097	12570
55°	22426	14263	10796
60°	21547	12335	8960
65°	20548	10366	8162
70°	19358	8538	7507
75°	17898	7779	7006
80°	15807	6954	6373
85°	12414	5486	5486



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	136.9	4.6
10°-20°	375.7	12.5
20°-30°	527.5	17.6
30°-40°	575.0	19.1
40°-50°	528.5	17.6
50°-60°	415.0	13.8
60°-70°	270.2	9.0
70°-80°	139.1	4.6
80°-90°	35.5	1.2
90°-100°	0.0	0.0
100°-110°	0.0	0.0
110°-120°	0.0	0.0
120°-130°	0.0	0.0
130°-140°	0.0	0.0
140°-150°	0.0	0.0
150°-160°	0.0	0.0
160°-170°	0.0	0.0
170°-180°	0.0	0.0
0°-30°	1040.1	34.6
0°-40°	1615.1	53.8
0°-60°	2558.7	85.2
0°-90°	3003.4	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3003.4	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1460	1460	1460	1460	1460	
5°	1460	1454	1437	1448	1444	138
15°	1389	1374	1330	1304	1291	391
25°	1261	1218	1131	1077	1057	580
35°	1086	1019	903	819	790	680
45°	888	800	661	567	535	686
55°	675	572	430	350	325	603
65°	456	349	230	185	181	452
75°	243	151	106	96	95	257
85°	57	29	25	25	25	68
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	1460.3	1460.3	1460.3	1460.3	1460.3
2.5°	1467.0	1460.3	1445.8	1459.0	1456.4
5°	1460.3	1453.7	1436.6	1448.5	1444.5
7.5°	1448.5	1440.5	1422.0	1427.3	1420.7
10°	1432.6	1423.3	1396.9	1392.9	1385.0
12.5°	1412.8	1400.9	1365.2	1357.3	1342.7
15°	1389.0	1374.4	1329.5	1304.4	1291.2
17.5°	1361.2	1340.1	1284.6	1255.5	1234.4
20°	1329.5	1303.1	1237.0	1204.0	1174.9
22.5°	1295.2	1264.8	1188.1	1143.2	1123.3
25°	1260.8	1218.5	1131.3	1077.1	1057.3
27.5°	1219.8	1174.9	1078.4	1016.3	985.9
30°	1176.2	1126.0	1020.3	952.9	917.2
32.5°	1133.9	1073.1	964.8	885.5	852.4
35°	1086.3	1018.9	902.6	819.4	790.3
37.5°	1040.1	967.4	844.5	753.3	720.3
40°	991.2	911.9	783.7	689.9	655.5
42.5°	941.0	856.4	722.9	625.1	592.1
45°	888.1	799.6	660.8	567.0	535.2
47.5°	837.9	744.1	601.3	507.5	478.4
50°	782.4	688.5	543.2	452.0	424.2
52.5°	728.2	629.1	487.7	400.4	375.3
55°	675.3	572.2	429.5	350.2	325.1
57.5°	621.1	515.4	378.0	304.0	282.8
60°	565.6	459.9	323.8	256.4	235.2
62.5°	511.5	405.7	277.5	214.1	203.5
65°	455.9	348.9	230.0	185.0	181.1
67.5°	403.1	296.0	185.0	162.6	158.6
70°	347.6	244.5	153.3	140.1	134.8
72.5°	294.7	196.9	128.2	117.6	115.0
75°	243.2	150.7	105.7	96.5	95.2
77.5°	191.6	107.0	83.3	78.0	75.3
80°	144.1	76.7	63.4	58.1	58.1
82.5°	100.4	51.5	43.6	41.0	41.0
85°	56.8	29.1	25.1	25.1	25.1
87.5°	21.1	10.6	10.6	9.3	9.3
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)